0986: COMPARISON OF NARROW-BAND IMAGING CYSTOSCOPY AND WHITE-LIGHT IMAGING CYSTOSCOPY TO DETECT BLADDER LESIONS – NORTHERN IRELAND INITIAL EXPERIENCE

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Objective: To compare the new technology of narrow-band imaging (NBI) cystoscopy with white-light imaging (WLI) cystoscopy, as WLI is currently the standard method used for diagnostic evaluation of bladder symptoms such as non visible/visible haematuria, persisting dysuria, recurrent UTI, supra pubic pain etc.

Patients and Methods: We evaluated 100 consecutive patients who attended our Day Unit for diagnostic Flexible Cystoscopy by WLI cystoscopy, followed by NBI cystoscopy as a further procedure, using the same video-cystoscope. Indication for Cystoscopy included evaluation of visible haematuria, non-visible haematuria, UTI/Dysuria symptoms and surveillance for bladder tumour recurrences. Bladder tumours and other lesions visualized by WLI or NBI cystoscopy were mapped and imaged and subsequently biopsied or treated by transurethral resection or fulguration.

Results: Of 100 patients, 30 were diagnosed to have with bladder tumour on WLI cystoscopy. These lesions were easily identified on NBI cystoscopy. In addition, small superficial bladder tumour was noted in 4 and Carcinoma in-situ was noted in 8 patients which were missed on WLI. Better visualisation was also noted with NBI Cystoscopy for benign lesions such as follicular cystitis, squamous metaplasia etc.

Conclusion: In our initial experience, NBI cystoscopy improved the detection of superficial bladder tumours and other bladder mucosal lesions over standard WLI cystoscopy.

1004: OPEN PARTIAL NEPHRECTOMY: AN IDEAL MODULAR BASED TRAINING OPERATION?

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Aim: With the advent of laparoscopic surgery, trainee's experience of open renal surgery is becoming limited. Supervised by an experienced consultant, our trainees are taught open partial nephrectomy (OPN) in a modular fashion. We review our trainee-performed procedures to determine if this is an appropriate training operation.

Methods: We performed a retrospective review of OPN from 2010-2012, collecting pre and post-operative data.

Results: 45 patients, median age of 56 years and M:F ratio of 2.2:1, underwent OPN. Median operative time was 153 minutes (85-243minutes). Mean tumour size was 28mm (10-70mm), and median cold ischaemic time was 30 minutes (12-43minutes). Histology revealed 31 renal cell carcinomas and 8 benign tumours (18%). Mean tumour margin clearance was 2.1mm (0-7mm) with no radiological reoccurrence during follow-up. Mean post-operatively creatinine increase was 8umol/L. Median length of stay was 4 days (3-14days). One patient had a postoperative bleed, requiring super-selective arterial embolisation. We report no urinary leaks.

Conclusion: OPN can be successfully taught as a modular based procedure, with comparable outcomes to the contemporary literature. OPN is a particularly good at teaching the principles of open renal surgery. Before becoming a trainer, the supervising urologist must be competent with OPN and potential intraoperative complications.

1031: POLYMERASE CHAIN REACTION (PCR) IN A PROOF OF CONCEPT STUDY TO INVESTIGATE BACTERAEMIA DURING STONE SURGERY

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Aim: Early identification of pathogens in sepsis is crucial for administration of appropriate antimicrobials. Our aim was to analyse PCR techniques, which have shown promise in detecting blood borne pathogen deoxyribonucleic acid (DNA) in sepsis, in Urology patients.

Method: Patients undergoing elective stone surgery, between August-December 2011, were recruited. Urine was tested for infection. Blood samples were collected at five points; anaesthetic induction, early, mid and late procedure, and recovery. Samples were analysed using real-time PCR for presence and species of pathogen DNA. The mid-procedure sample was cultured. Data was collected on patient demographics, observations and anaesthetic interventions. Approved ethics from local NRES Committee.

Results: Sets of blood samples from 12 patients were processed using real-time PCR. Ten patients underwent ureteroscopy and laser lithotripsy, two had percutaneous nephrolithotomy. Three patients developed sepsis. Six patients had at least 1 positive PCR result for common uro-pathogens. One patient had positive PCR and blood culture; Candida Glabrata was identified by both tests.

Conclusions: We have shown that PCR technology detects pathogenic DNA during stone surgery. PCR results can be available within 4 hours of sampling. More work is required to determine potential applications for this promising technique in management of urological patients.

1033: REDUCING THE RISK OF UPSTAGING UROTHELIAL CANCER AT THE TIME OF CYSTECTOMY; A STUDY INVESTIGATING THE EFFECT OF TIME BETWEEN PREOPERATIVE STAGING AND SURGERY ON BLADDER CANCER UPSTAGING

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Aim: Accurately staging those patients considered suitable for radical treatment of urothelial malignancy is essential. Despite this, the discrepancy between preoperative staging and radical cystectomy pathology ranges from 20 to 80%. The aim of this study is to establish if there is a correlation between tumour upstaging and the time between preoperative staging and surgery.

Method: All cystectomies performed at a West Midlands NHS trust between 1st January 2010 and 31st December 2012 were analysed. The time between preoperative staging and cystectomy was recorded, and preoperative staging compared with postoperative histological staging.

Results: 4 (21%) patients who underwent a cystectomy within 6 weeks of being staged T0-T3 subsequently had their disease upstaged post-operatively ($p<0.05$). Comparatively, 13 (42%) patients who underwent a cystectomy more than 6 weeks after their initial staging were upstaged ($p<0.05$).

Conclusions: Patients who wait more than 6 weeks to have a radical cystectomy after their pre-operative staging are twice as likely to be upstaged post operatively. This demonstrates the necessity for prompt treatment following preoperative staging.

1044: GREEN LIGHT LASER XPS FOR TREATMENT OF BENIGN PROSTATIC OBSTRUCTION REDUCES HOSPITAL STAY: A CLOSED-LOOP AUDIT

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Background: Current surgical treatment for benign prostatic obstruction (BPO) is transurethral resection of prostate (TURP). Green Light Laser Prostatectomy (GLLP) (180W Green Light XPS Laser with MoXy liquid-cooled fibre, AMS, Minnesota, USA) is a novel surgical treatment that ablates prostatic tissue, with manufacturers boasting quicker post-operative recovery and better control of bleeding vessels.

Aims: To identify if post-operative outcomes were improved following introduction of GLLP as a new treatment of BPO.

Methods: Patients considered suitable for surgical treatment of BPO were those who had failed medical therapy or were previously catheterised for urinary retention. The first cycle of the audit collected data from patients who received TURP for BPO following Length-of-stay and length of post-operative catheterisation were recorded. The audit was repeated following GLLP introduction.

Results: Patients undergoing GLLP (n=109, mean age=69) had a significantly shorter length-of-stay compared to those undergoing TURP (n=98, mean age=72) (median 3 days vs 1 day, $p<0.0001$). Successful post-operative trial-without-catheter was similar in both groups (GLLP – 82.6%, TURP – 82%). Fewer patients who received GLLP required long-term catheterisation (3% vs 8%).

Conclusion: GLLP is associated with a shorter inpatient stay and lower rate of long-term catheterisation than TURP. Successful TWOC rates seem similar.